SOBOLEVA, A.D.; GEL'SHTEYN, G.G.; FITILEVA, L.M.

Arteriovenous aneurysm of the right branch of the pulmonary artery arising as a result of congenital heart defect - sinistral division of the cardiac bulb. Arkh. pat. 23 no. 1:78-81 '61.
(MIRA 14:1)

(HEART—ABNORMITIES AND DEFORMITIES) (FISTULA)
(PULMONARY ARTERY—ABNORMITIES AND DEFORMITIES)

FITILEVA, L.M., kand.med.nauk

Phonocardiographic studies before and after operation in patients with patent ductus arteriosus. Khirurgiia 35 no.10:59-66 O '59.
(MIRA 12:12)

1. Iz laboratorii elektrokardiografii Instituta grudnoy khirurgii AMN SSSR (dir. - prof. A.N. Bakulev).
(DUCTUS ARTERIOSUS surgery)
(PHONOCARDIOGRAPHY)

FITILEVA, L. M., Dr. Medic. Sci. (diss) "Phonocardiography in Surgery for Acquired Defects of Heart," Moscow, 1961, 27 pp. (Acad. Medic. Sci. USSR) 250 copies (KL Supp 12-61, 283).

FITILEVA, L. M.

Auscultatory and phonocardiographic data in aortic stenosis in the preoperative period and after operation. Grud. khir. no.4:43-49 '61. (MIRA 14:12)

1. Iz laboratorii funktsional'noy diagnostiki (zav. - kandidat meditsinskikh nauk G. G. Gel'shteyn) Instituta grudnoy khirurgii (dir. - prof. S. A. Kolesnikov) AMN SSSR.

(AORTA--DISEASES) (AUSCULTATION)
(HEART--SOUNDS)

FITILEVA, L.M.; BUSLENKO, N.S. (Moskva)

Characteristics and diagnostic significance of diastolic murmur in mitral stenosis with regular rhythm of cardiac contraction. Klin.med. no.7:96-102 '61. (MIRA 14:8)

1. Iz laboratorii funktsional'noy diagnostiki (zav. - kand.med. nauk G.G. Gel'shteyn) Instituta grudnoy khirurgii AMN SSSR (dir. - prof. S.A. Kolesnikov, nauchnyy rukovoditel' - akad. A.N. Bakulev) i kliniki fakul'tetskoy khirurgii (zav. - prof. A.A. Busalov) pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta.
(MITRAL VALVE--DISEASES) (HEART--SOUNDS)

KOLESNIKOV, S.A., prof.; FITILEVA, L.M.

Evaluation of methods of mitral commissurotomy by meansof the phonocardiographic examination of patients. Vest.khir. 87 no.11: 46-51 N '61. (MIRA 15:11)

1. Iz otdeleniya priobretennykh porokov serdtsa (zav. - prof. S.A. Kolesnikov) i laboratorii funktsional'noy diagnostiki (zav. - kand.med.nauk G.G. Gel'shteyn) Instituta grudnoy khirurgii (dir. - prof. S.A. Kolesnikov, nauchn. rukovoditel' - prof. A.N. Bakulev) AMN SSSR.

(MITRAL VALVE—SURGERY) (HEART—SOUNDS)

FITILEVA, L.M.

Phonocardiographic method for diagnosing stenosis of the left atrioventricular orifice in atrial fibrillation and flutter. Grud. khir. 1 no.5:31-38 S-O '61. (MIRA 15:3)

1. Iz Instituta grudnoy khirurgii AMN SSSR (dir. - prof. A.A. Busalov, nauchnyy rukovoditel' - akademik A.N. Bakulev). Adres avtora: Moskva, Leninskiy prosp.,d.8. Institut grudnoy khirurgii AMN SSSR.

(PHONOCARDIOGRAPHY) (HEART--DISEASES) (ARRHYTHMIA)

FITILEVA, Lyudmila Mikhaylovna, terapevt-klinitsist; BOGOSLOVSKIY, V.A., red.; KUZ'MINA, N.S., tekhn. red.

[Short manual on phonocardiology] Kratkoe rukovodstvo po fonokardiografii. Moskva, Medgiz, 1962. 127 p. ___ [Phonorecord "Acquired heart defects" (side 1). "Congenital heart defects" (side 2)] Grammofonnaia plastinka "Priobretennye poroki serdtsa" (1 storona). Vrozhdennye poroki serdtsa" (2 storona)
(MIRA 15:5)

(HEART—SOUNDS)

FITILEVA, L.M.; KHUDABASHYAN, N.N.

Defect of the tricuspid valve associated with mitral and aortic defects. Zhur. eksp. i klin. med. 5 no.2:32-38 '65.
(MIRA 19:1)

L 12240-66 EWT(1)/EWT(m)/EPF(n)-2/T/ETC(m) WW/DJ

ACC NR: AP6001011 SOURCE CODE: UR/0286/65/000/022/0083/0084

AUTHORS: Fitingof, A. N.; Gubin, M. I.; Makarenko, K. P.

ORG: none

TITLE: A glandless centrifugal pump. Class 59, No. 176491

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 83-84

TOPIC TAGS: pump, centrifugal pump, corrosion, corrosion prevention

ABSTRACT: This Author Certificate presents a glandless centrifugal pump with a gas-filled casing. The pump is provided with an electric motor, a gas-distributing chamber, and an automatic apparatus for feeding inert gas (see Fig. 1). To protect the rotor and valves of the electric motor from aggressive liquids by a continuous feed of the inert gas into the distributing chamber, the automatic apparatus regulating the gas flow is made in the form of a valve activated by a float placed

Card 1/2

UDC: 621.671.2-531.3

L 13598-66

ACC NR: AP6001011

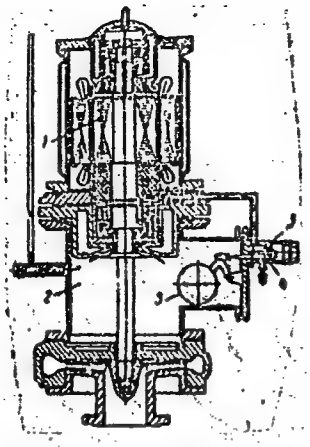


Fig. 1. 1 - Electric motor; 2 - gas distribution chamber; 3 - automatic apparatus; 4 - valve; 5 - float.

in the gas-distributing chamber. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 13Apr64

Card 2/2

FITINGOF, S.A.

PA 45/49T24

USSR/Chemistry - Colloids Mar/Apr 49
Chemistry - Emulsions

"Galvanometric Study of Phases of Concentrated Emulsions," B. A. Pashkovan, S. A. Fitingof, Kirgiz Affiliate, Acad Sci USSR, Chem Inst, 4 pp

"Kolloid Zhur" Vol XI, No 2

Suggests new method (galvanometric) to investigate phases in emulsions. Investigates phase alterations in saponification of cottonseed oil by caustic potash. Shows that this type of emulsion is affected by electrolyte concentration, temperature, and stabilizer concentration. Under certain

45/49T24

USSR/Chemistry - Colloids (Cont'd) Mar/Apr 49

conditions a very stable water-oil emulsion can be obtained. Submitted 2 Jan 48.

45/49T24

FITINGOF, S. N., KRASIL'NIKOV, R. I.,1, SHUR. I. V., YAKOVLEV, L. A.,2, KUKHARKOVA, L. L.,3, FREYDLIN, E. M., PEROVA, P. V., IL'YASHENKO, M. A.,4, TRUDOLYUBOVA, G. B., RUSANOV, R. S., KONUSPAYEVA, U. S., MITROFANOV, V. N., and KAPERNAUMOVA, N. P.,5, (1 Senior Scientific Workers), (2 Professors), (3 Director of the Laboratory of Microbiology and Veterinary Sanitary Inspection of VNIIMP [All-Union Scientific Research Institute of the Meat Industry), (4 Candidates of Veterinary Sciences), (5 Junior Scientific Workers.)

"Sanitary Appraisal of Mutton from Sheep Infected by Brucellosis."
Veterinariya vol. 38., no. 11., November 1961., p. 60

SHUR, I.V., prof.; YAKOVLEV, L.A., prof.; KUKHARKOVA, L.L.; FREYDLIN, Ye.M., kand. veterin. nauk; PEROVA, P.V., kand. veterin. nauk; IL'YASHENKO, M.A., kand. veterin. nauk; KRASIL'NIKOV, R.I., starshiy nauchnyy sotrudnik; FITINGOF, S.N.; starshiy nauchnyy sotrudnik; TRUDOLYUBOVA, G.B., mladshiy nauchnyy sotrudnik; RUSANOV, R.S., mladshiy nauchnyy sotrudnik; KONUSPAYEVA, U.S., mladshiy nauchnyy sotrudnik; MITROFANO., V.N., mladshiy nauchnyy sotrudnik; KAPERNAUMOVA, N.P., mladshiy nauchnyy sotrudnik;

Sanitary evaluation of meat from sheep with brucellosis. Veterinariia 38 no.11:60-65 N '61 (MIRA 18:1)

1. Rukovoditel' laboratorii mikrobiologii i veterinarno-sanitarnoy ekspertizy Vsesoyuznogo nauchno-issledovatel'skogo instituta myasnoy promyshlennosti (for Kukharkova).

PRAKHOV, V., inzh.; FITINGOF, V., inzh.

Photoflash with universal power supply. Radio no.6:49 Je '62.
(MIRA 15:5)

(Photography—Equipment and supplies)
(Electric power supply to apparatus)

FITISCV, V.

For active mass organizations of scientific technological societies.
NTO 3 no.6:36-37 Je '61. (MIRA 14:6)

1. Predsedatel' Voronezhskogo oblastnogo soveta profsoyuzov.
(Technical societies)

KUKHARKOVA, L.L., starshiy nauchnyy sotrudnik; FREYDLIN, Ye.M., kand.veter. nauk; PEROVA, P.V.; IL'YASHENKO, M.A.; TRUDOLYUBOVA, G.B., mladshiy nauchnyy sotrudnik; PLOTNIKOV, V.I.; KRASIL'NIKOV, R.I., starshiy nauchnyy sotrudnik; FITINGOV, S.N., starshiy nauchnyy sotrudnik; RUSANOV, R.S., mladshiy nauchnyy sotrudnik; KONUSPAYEVA, U.S., mladshiy nauchnyy sotrudnik; Prinimali uchastiye: YAKOVLEV, L.A., prof.; MITROFANOV, V.N.

Sanitary evaluation of the meat of sheep affected with brucellosis. Trudy VNIIMP no.14:87-95 '62. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti (for Kukharkova, Freydlin, Perova, Il'yashenko, Trudolyubova, Plotnikov). 2. Kazakhskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta myasnoy promyshlennosti (for Krasil'nikov, Fitingov, Rusanov, Konuspayeva). 3. Saratovskiy zooveterinarnyy institut (for Yakovlev). 4. Saratovskaya oblastnaya veterinarnaya bakteriologicheskaya laboratoriya (for Mitrofanov).

(Meat inspection) (Brucellosis in sheep)

FITISOV, Vasiliy Anisimovich; FOMENKO, I.P., red.; ANDREYEVA, L.S., tekhn. red.

[Organization of workers' rest] Organizatsiia otdykha trudiashchikhsia. Moskva, Profizdat, 1963. 45 p. (Biblioteehka profsoiuznogo aktivista, no.23(71)) (MIRA 17:3)

BOYKO, G.A., inzh.; BERNADSKIY, V.N., kand.tekhn.nauk; FITKEVICH, M.F.; inzh.

Plate heat exchangers in the domestic "Ukraina-70" refrigerator. Khol. tekh. 40 no.3:25-27 My-Je '63. (MIRA 16:9)

1. Institut elektrosvarki im. Ye.O.Patona AN UkrSSR (for Boyko). 2. Vasil'kovskiy zavod kholodil'nikov (for Fitkevich).
(Refrigerators)

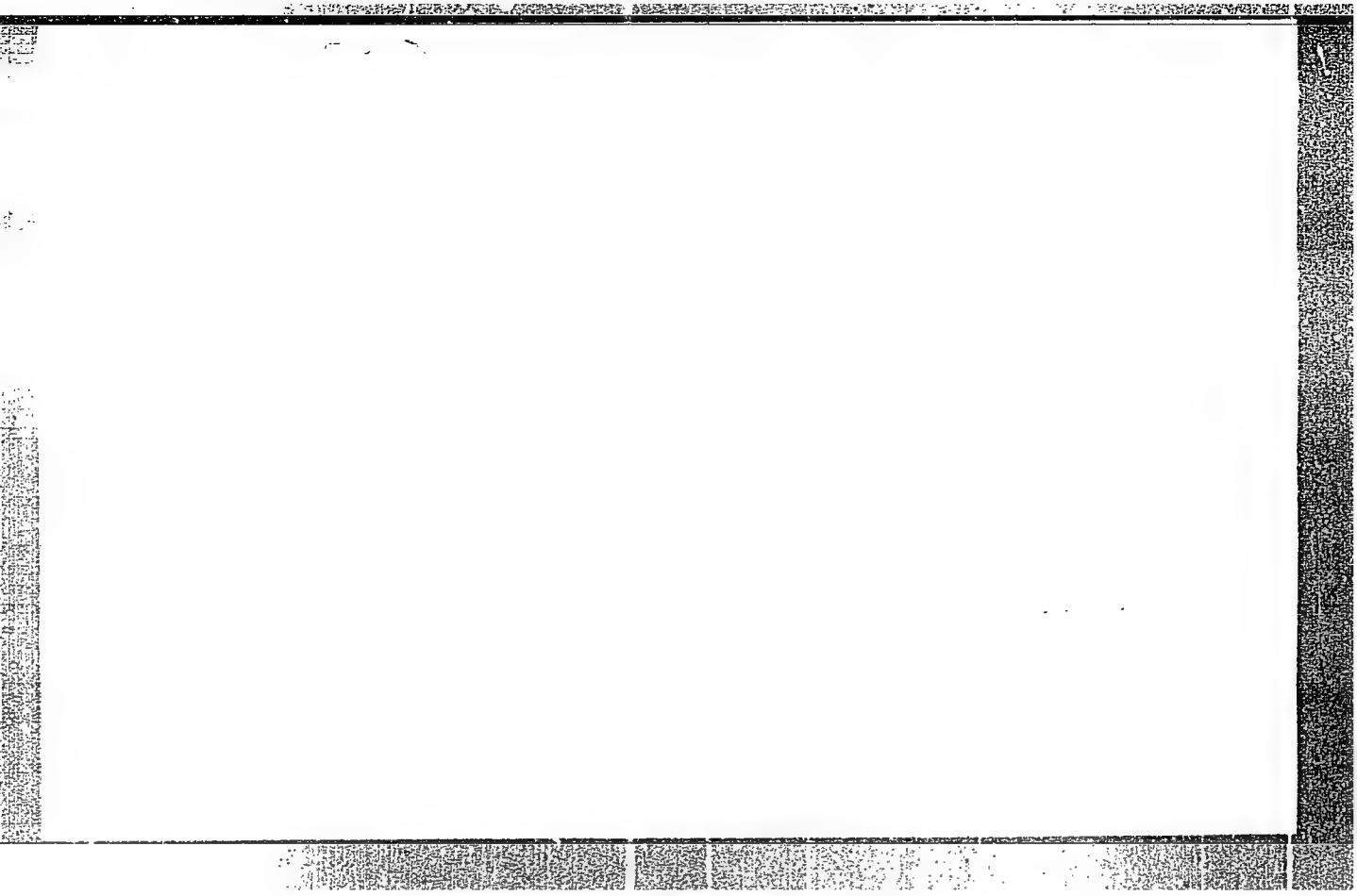
FIT'hE, L. F., Engr.

"Method for Determining the Capacity and Location of a Station in a Regionalized City Telephone Network." Cand Tech Sci, Moscow Electrical Engineering Inst of Communications, Faculty of Telephone and Telegraph Communications, 1953-1954. (VS-Feb 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions. (13)
SO: Sum. No. 598, 29 Jul 55

FITKO, P., KORYN, E.

Gospodarka cieplna i wentylacyjna w pomieszczeniach dla zwierząt (Thermal and ventilation economy in premises for animals), by P. Fitko, E. Koryn. Reported in New Books, (Nowe Ksizaki), No. 6, March 15, 1956.



APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000413310019-9"

FITKO, R.

"Determining Carbon Dioxide by Means of Gadzikiewicz' Method in the Practical Application of Animal Hygiene", P. 489, (MEDYCYNA WETERYNARYJNA, Vol. 9, No. 11, Nov., 1953, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

BAJUSZ, Eors; FITKO, Remigiusz

Therapeutic effects of KCl and MgCl2 in acute poisoning with diphtheria toxin in guinea pigs. Polski tygod.lek. 15 no.21: 779-781 23 My '60.

1. Instytut de Medicine et de Chirurgie experimentales Universite de Montreal; Monteal, Kanada; dyrektor prof. dr Hans Selye
(MAGNESIUM pharmacol)
(POTASSIUM pharmacol)
(DIPHTHERIA)
(TOXINS AND ANTITOXINS)

FITKO, Remigiusz

Protective role of placenta and embryo against the development of "infarctoid cardiopathy" in rats. Polski tygod.lek. 15 no.34: 1297-1299 22 Ag '60.

1. Z Instytutu Medycyny Doswiadczalnej i Chirurgii Universytetu Montrealskiego, Montreal, Kanada; dyrektor: prof. dr Hans Selye
(MYOCARDIAL INFARCT exper.)
(PREGNANCY physiol.)

DOMANSKI, E.(Bydgoszcz); FITKO, R.(Warszawa)

Hormonal disorders and resulting reproduction and lactation disturbances in cows after the foot-and-mouth disease. Rocz nauk roln wet 70 no.1/4:307-308 '60. (EEAI 10:9)

(Cattle) (Hormones) (Foot-and-mouth disease)

FITKO, Remigiusz; DOMANSKI, Eugeniusz, prof. dr.

The hormonal system and its influence upon the pathogenesis of cystic degeneration of the ovaries in animals. Zeszyty problemowe post nauk roln no.31:101-105 '61.

1. Zaklad Fizjopatologii, Wydzial Weterynaryjny, Szkola Glowna Gospodarstwa Wiejskiego, Warszawa. Kierownik: prof. dr. E. Domanski

PILINC, Remigiusz
SURNAME (in caps); Given Names

Country: Poland

Academic Degrees:

Affiliation:

Source: Warsaw, Medycyna Weterynaryjna, No 4, April 1961, pp 193-201

Data: "Selye's Theory of Stress."

FITKO, Remigiusz

Effect of stilbestrol and chorionic gonadotropins in sex organs and endocrine glands in rats. Endodr. pol. 13 no.1:15-23 '62.

1. Katedra Fizjopatologii Wydzialu Weterynaryjnego SGGW w Warszawie Kierownik: prof. dr E.Domanski.

(DIETHYLSTILBESTEROL pharmacol)
(GONADTROPINS CHORIONIC pharmacol)
(GENITALIA FEMALE pharmacol) (ENDOCRINE GLANDS pharmacol)

FITKO, Remigiusz

The role of non-hormonal factors in the formation of ovarian cysts in animals. Zeszyty problemowe post nauk roln no.31:107-110 '61.

1. Zaklad Fizjopatologii, Wydzial Weterynaryjny, Szkola Glowna Gospodarstwa Wiejskiego, Warszawa. Kierownik: prof. dr. E. Domanski

FITKO, Remigiusz; DOMANSKI, Eugeniusz

Studies on cyst-forming properties of luteinizing gonadotropic hormones. Endokr. pol. 13 no.5:571-593 '62.

1. Katedra Fizjopatologii Wydzialu Weterynaryjnego SGGW w Warszawie. Kierownik: prof. dr E. Domanski.
(ICSH) (OVARIES)

FITKO, Remigiusz

Follicle-stimulating gonadotropins as cyst-forming factors. Endokr. pol. 13 no.6:693-710 '62.

1. Katedra Fizjopatologii Wydzialu Weterynaryjnego SGGW. Kierownik: prof. dr E. Domanski.

(FSH) (GONADOTROPINS PITUITARY) (OVARY) (CYSTS)

FITKO, Remigiusz

Effect of post-graumatic inflammation of the ovary and uterus on the appearance of cystic changes. Endokr. pol. 14 no.1: 69-83 '63.

1. Katedra Fizjopatologii Wydzialu Weterynaryjnego SGGW w Warszawie Kierownik: prof. dr E. Domanski.
(OVARY) (UTERUS) (INFLAMMATION)
(WOUNDS AND INJURIES) (CYSTS)

FITKO, Remigiusz

Studies on the mechanism of the "thyrotropic" action of gonadotropins. Acta physiol. pol. 14 no.1:91-95 '63.

1. Z Katedry Fizjopatologii Wydzialu Weterynaryjnego SGGW w Warszawie Kierownik: prof. dr E. Domanski.
(GONADOTROPINS, CHORIONIC) (GONADOTROPINS)
(ESTRADIOL) (PHARMACOLOGY) (THYROID GLAND)
(OVARY)

FITKO, Remigiusz

Thyro-gonadotropic antagonism in male rats. Acta physiol. pol. 14 no.1:97-104 '63.

1. Z Katedry Fizjopatologii Wydz. Weterynaryjnego SGGW w Warszawie Kierownik: prof. dr E. Domanski.
(GONADOTROPINS, CHORIONIC) (THYROID GLAND)
(PHARMACOLOGY) (THYROIDECTOMY)
(METHYLTHIOURACIL)

POLAND

FITKO, Remigiusz, Department of Physiopatholgy (Zaklad Fizjopatologii), Veterinary Faculty (Wydzial Weterynaryjny), SGGW [Szkola Glowna Gospodarstwa Wiejskiego, Main School of Rural Economy] in Warsaw [Author's title: Dr.]

"What is Stress?"

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 33, 12 Aug 63, pp 1238-1240

Abstract: Reference here is to an article by Prof. Dr. J. RUTKOWSKI, entitled "Stress in Medicine (According to Selye) and New Conception of Medicine" (Polski Tygodnik Lekarski, Vol 17, No 34, 1962, p 1357). The author, who was a student of Selye criticizes Prof. Rutkowski of inaccurate presentation of Selye's theory and of confusion in understanding the concepts involved. He explains what "stress" is and points out to weaknesses of Selye's theory. Prof. Rutkowski, in an enclosed reply, disclaims any misinterpretation, defends Selye's contribution, and countercharges Dr. Fitko of being philosophical and not to the point. There are no references.

1/1

FITKO, Remigiusz

The uterus and "thyreotropic" action of gonadotropins. Acta physiol. Pol. 15 no.2:293-296 Mr-Ap '64.

1. Z Katedry Fizjopatologii Wydzialu Weterynaryjnego Szkoly Glownej Gospodarstwa Wiejskiego w Warszawie (Kierownik: prof. dr E. Domanski).

FITKO, Remigiusz

Role of the uterus in the etiology and pathogenesis of cystic degeneration of the ovary. Ginek. Pol. 35 no.5:647-653 S-O '64

1. Z Katedry Fizjopatologii Wydziału Weterynarii Szkoły Glownej Gospodarstwa Wiejskiego w Warszawie (Kurator: prof. dr. E. Domanski).

FITKO, Remigiusz

The influence of thyroxine and gonadotropins on oxygen uptake by gonadal tissues. Endokr. Pol. 16 no.2:177-181 Mr-Ap'65.

1. Zaklad Fizjopatologii Wydzialu Weterynarii Szkoly Glownej Gospodarstwa Wiejskiego w Warszawie (Kurator: prof. dr. E. Domanski).

FITKO, Remigiusz

Studies on gonadotropin "utilization" by gonadal tissues. Endokr. Pol. 16 no.3:289-294 My-Je'65.

1. Zaklad Fizjopatologii Wydzialu Weterynaryjnego Szkoly Glownej Gospodarstwa Rolnego w Warszawie (Kurator: prof. dr. K. Domanski).

FIT'O, I.S.

Case of chyluria. Urologiia no.5:57-58 '62. (MIRA 15:12)

1. Iz urologicheskoy kliniki (zav. - dotsent M.B. Plastunov [deceased]) L'vovskogo meditsinskogo instituta.
(URINE—ANALYSIS AND PATHOLOGY) (CHYLE)

GUSEVA, N.A.; FITONOVA, L.I.

Outbreak of tularemia in Astrakhan during the period of 1957-1958 and its causes. Zhur. mikrobiol., epid. i immun. 33 no.7:19-22 Jl '62. (MIRA 17:1)

1. Iz Astrakhanskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.

BEZUMNOVA, F.I.; GUSEVA, N.A.; KAZEYKINA, A.N.; AKHMEDZYANOVA, M.N.; FITONOVA, L.I.

Etiology of leptospirosis in Astrakhan Province. Zhur.mikrobiol., epid. i immun. 42 no.2:45-48 F '65. (MIRA 18:6)

1. Astrakhanskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya i Astrakhanskaya oblastnaya veterinarnaya laboratoriya.

TOTH, Lajos (Debrecen); FITORI, Janos (Debrecen)

Vibration of threadlike water columns in a communicating vessel consisting of more than two pipes. Fiz szemle 15 no.2:55-57 F '65.

KOLESNIK, L.V., prof., doktor sel'skokhozyaystvennykh nauk; FITOVA, L., red.; KAPITSA, V., tekhn. red.

[Grape nursery] Vinogradnyi pitomnik. Kishinev, Gos. izd-vo Moldavii, 1957. 126 p. (MIRA 11:10)
(Nurseries (Horticulture)) (Moldavia--Viticulture)

UNGURYAN, P.N., KABLUCHKO, G.A., otv.red.; FITOVA, L., red.; PELYAKH, M.A., kand.sel'skokhoz.nauk, red.; MOGILYANSKIY, N.K., doktor tekhn.nauk, zaluzhennyy deyatel' nauki i tekhniki, red.; TALITSKIY, V.I., red.; TEL'PIS, V., tekhn.red.

[Principles of wine making in Moldavia] Osnovy vinodeliia Moldavii. Kishinev, Gos.izd-vo "Kartia moldoveniaske," 1960. 293 p. (Kishinev. Moldavskii nauchno-issledovatel'skii institut sadovodstva, vinogradarstva i vinodeliia. Trudy, vol.5). (MIRA 14:8)
(Moldavia--Wine and wine making)

LIPIS, B.V., kand.tekhn.nauk, red.; FITOVA, L., red.; KAPITSA, V., tekhn.red.

[Brief technical manual on wine making] Kratkii tekhnicheskii spravochnik vinodela. Kishinev, Gos.izd-vo "Kartia Moldovenieske," 1960. 547 p. (MIRA 14:1)
(Wine and wine making)

VLADIMIROVA, V.L., kand. sel'khoz. nauk; FITOVA, L., red.; POLONSKIY, S., tekhn. red.

[Growing vegetables in greenhouses and hotbeds] Vyrashchivanie ovoshchei v teplitsakh i parnikakh. Kishinev, Gos. izd-vo "Kartia moldoveniaske 1959. 26 p. (MIRA 14:8)
(Vegetable gardening) (Greenhouses) (Hotbeds)

GENKEL', P.A., prof., otv. red.; MATSYUK, L.S., kand. sel'khoz. nauk, zam. red.; DIMO, N.A., red. [deceased]; DIKUSAR, I.G., doktor sel'khoz. nauk, red.; YAROSHENKO, M.F., doktor biol. nauk, red.; KOVARSKIY, A.Ye., doktor sel'khoz. nauk, red.; ZUBKOV, A.A., doktor med. nauk, red.; PRINTS, Ya.I., doktor biol. nauk, red.; GEYDEMAN, T.S., kand. biol. nauk, red.; IVANOV, S.M., kand. biol. nauk, red.; USPENSKIY, G.A., kand. biol. nauk, red.; GERGELEZHIU, A.K., kand. tekhn. nauk, red.; FITOVA, L., red.; KARYAKINA, I., red.; KOCHANOVA, N., red.; TEL'PIS, V., tekhn. red.

[Papers of the United Scientific Session of the Department of Biological Sciences of the Academy of Sciences of the U.S.S.R., the Department of Agriculture of the V.I.Lenin All-Union Academy of Agricultural Sciences and the Moldavian Section of the Academy of Sciences of the U.S.S.R.] Trudy ob"edinennoi nauchnoi sessii: Otdelenie biologicheskikh nauk AN SSSR, Otdelenie zemledeliia VASKhNIL, Moldavskii filial AN SSSR. Kishinev, Kartia Moldoveniaske. Vol.2. 1959. 483 p. (MIRA 15:5)

1. Ob"edinennaya nauchnaya sessiya, Kishenev, 1957. Zamestitel' akademika-sekretarya Otdeleniya biologicheskikh nauk Akademii nauk SSSR (for Genkel'). 2. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Dimo).
(Moldavia--Agricultural research--Congresses)

POLIKARPOV, Vladimir Pavlovich; FITOVA, L., red.; KURMAYEVA, T., tekhn.red.

[Correct way to plan and plant an orchard] Kak pravil'no sproektirovat' i posadit' sad. Kishinev, Gos.izd-vo "Kartia moldoveniaske," 1961. 17 p. (MIRA 14:6)
(Fruit culture)

VASKAN, Grigoriy Kuz'mich; FITOVA, L., red.; KURMAYEVA, T., tekhn.red.

[Soil cultivation in fruit-bearing orchards] Ukhod za pochvoi v plodonosiashchem sadu. Kishinev, Gos.izd-vo "Kartia moldoveniaske," 1961. 22 p. (MIRA 14:6)
(Fruit culture) (Tillage)

GUZINSKIY, D.Ya.; VASKAN, G.K., nauchnyy sotr.; POLIKARPOV, V.P.; FITOVA, L.; red.; ZHEMANYAN, N., tekhn. red.

[Orchards on the Dniester terraces; development of fruit culture on the "Put' k kommunizmu" Collective Farm in Dubossary District] Sady na terrasakh Dnestra; iz opyta razvitiia sadovodstva kolkhoza "Put' k kommunizmu" Dubossarskogo raiona. Kishinev, Gos. izd-vo "Kartia moldoveniaske," 1961. 59 p. (MIRA 14:7)

1. Predsedatel' kolkhoza "Put' k kommunizmu" Dubossarskogo rayona (for Guzinskiy). 2. Nauchno-issledovatel'skiy institut sadovodstva, vinogradarstva i vinodeliya (for Vaskan, Polikarpov)
(Dubossary District—Fruit culture)

MASLOV, Vasiliy Yakovlevich; SMYKOV, Vladimir Karpovich; KHRAMOV, Yevgeniy Sergeyevich; FITOVA, L., red.; KURMAYEVA, T., tekhn.red.

[Best stone fruit varieties for Moldavia] Luchshie sorta kostochkovykh porod dlia Moldavii. Kishinev, Gos.izd-vo "Kartia moldoveniaske," 1961. 62 p. (MIRA 14:6)
(Moldavia--Stone fruit--Varieties)

TROYAN, Timofey Ivanovich; KURTS, Robert Yevgen'yevich; FITOVA, L., red.

[New developments in housing construction in Moldavia] Novoe v zhilishchnom stroitel'stve Moldavii. Kishinev, Kartia moldovenieske, 1963. 52 p. (MIRA 18:9)

MATVEYEV, Lev Vasil'yevich; FITOVA, L., red.

[Large-block and large-panel construction from sawed limestone] Krupnoblochnoe i krupnopanel'noe stroitel'stvo iz pil'nykh izvestniakov. Kishinev, Kartia moldoveniaske, 1963. 197 p. (MIRA 18:1)

GAVRILITSA, Ivan, zven'yevoy; FITOVA, L., red.

[Our practices in growing sugar beets according to the new technology] Nash opyt vozdelyvaniia sakharnoi svekly po novoi tekhnologii. Kishinev, Kartia moldoveniaske, 1965. 34 p. (MIRA 18:5)

1. Kolkhoz "Pravda" Rezinskogo proizvodstvennogo upravleniya (for Gavrilitsa).

NAFTALIYEV, N.Ya.; FITOVA, L., red.

[Growing vegetables on irrigated land is profitable to the collective farm] Vyrashchivanie ovoshchei na polivnykh zemliakh vygodno kolkhozu. Kishinev, Kartia moldoveniaske, 1965. 41 p. (MIRA 18:4)

1. Rukovoditel' peredovoy ovoshchevodcheskoy brigady No.9 kolkhoza im. Michurina Tiraspol'skogo rayona (for Neftaliyev).

IVANOV, P.V., prof.; ZEL'TSER, V.Ya., inzh.; FITOVA, L., red.

[Bases for the mechanized establishment of vineyards on slopes] Osnovy mekhanizirovannogo osvoeniia sklonov pod vinogradniki. Kishinev, Kartia moldoveniaske, 1965. 127 p.
(MIRA 18:9)

BRAYKOV, S.F., svinar'; FITOVA, L., red.

[19 baby pigs from each brood sow] 19 porosiat ot kazhdoi svinomatki. Kishinev, Kartia moldoveniaske, 1965. 22 p. (MIRA 19:1)

FITOWSKI, Zygmunt

Fistulae of the alveolar process. Otolaryng. Pol. 18 no.2: 277-281 '64.

1. Z I Kliniki Laryngologii SDL Akademii Medycznej w Warszawie (Kierownik: prof. dr. med. T. Bystrzanowska).

LIVYY, G.V., kand. tekhn. nauk; KAZARINA, N.N., inzh.; GIL'MAN, B.A., inzh.; FASTOVETS, O.S., inzh.; MOROZYUK, N.I., inzh.; LITVINOV, Sh.I., inzh.; SAGAYDACHNYY, V.G., inzh.; BALAYEV, Ya.V., inzh.; FITSA, A.S., inzh.

Manufacture of leather for lining and accessories from the face split of DOL type pigskins. Kozh.-obuv. prom. 7 no.6: 29-32 Je '65. (MIRA 18:8)

POLUKEYEV, A.G., inzh.; [illegible]

Protection of ballast against sand accumulation. Put' i put.khoz. 9 no.8:10-11 '65. (MIRA 18:8)

1. Nachal'nik Likhovskoy [illegible] (for Polukeyev). 2. Starshiy dorozhnyy master po [illegible], stantsiya Debal'tsevo, Donetskoy dorogi.

MAKAROVSKIY, S.N.; NORKIN, K.B.; FITSNER, L.N.

Using ERA-1 optimalizers for heating furnaces. Priborostroenie no.4:25-27 Ap '63. (MIRA 16:4)

(Furnaces, Heating) (Electronic control)

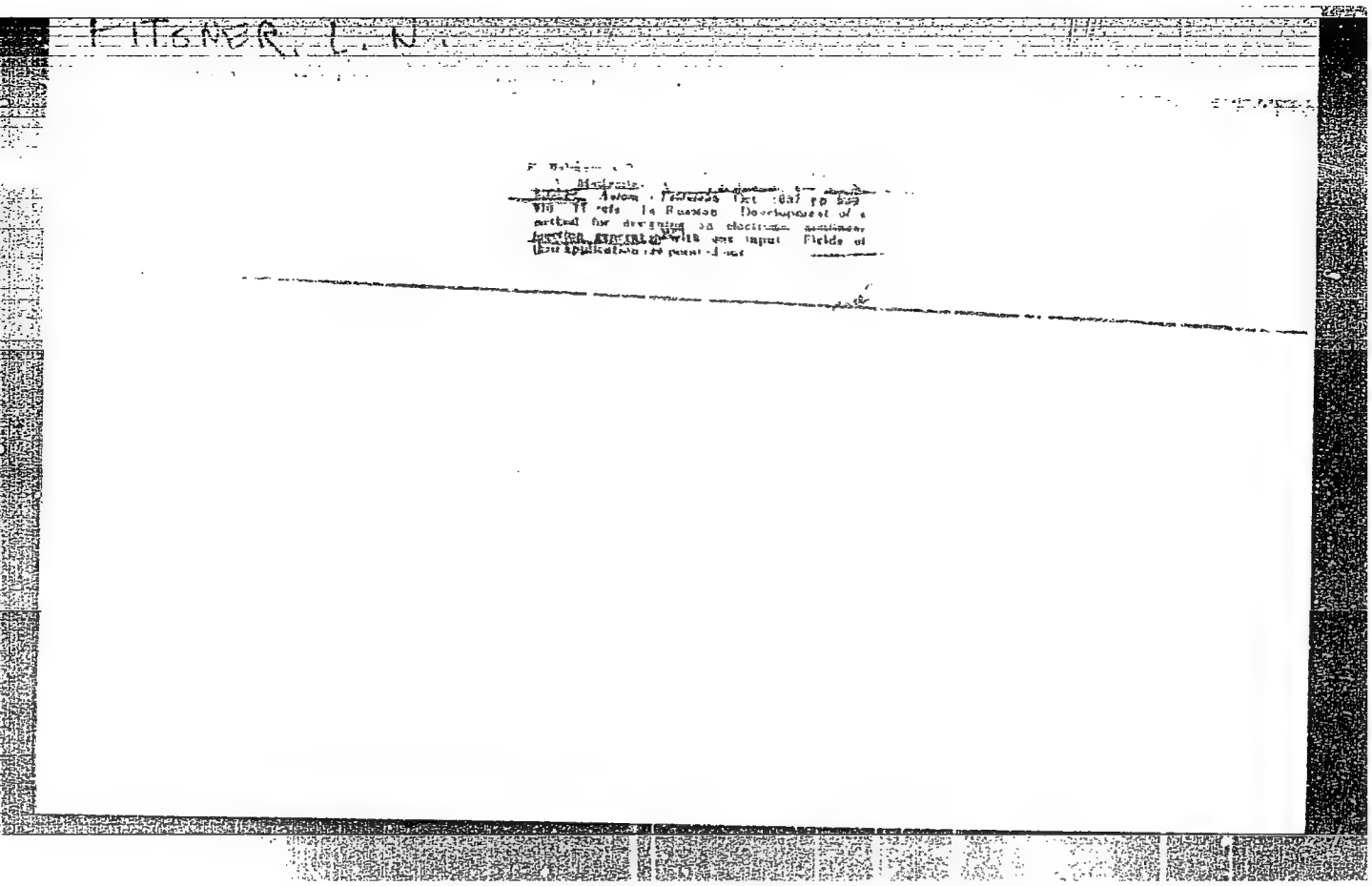
FITSNER, L.N.

Thyrite product-computing blocks. Priborostroenie no.4:9-11 Ap '56. (MLRA 9:8)

(Electronic calculating machines)

FITSNER, L.N. (Moskva)

The [MDB-1] servomechanism with a built-in correction unit. Avtom. i telem. 17 no.3:228-237 Mr '56. (MLRA 9:7)
(Servomechanisms)



VASIL'YEV, [illegible] D. N.T. and FITSNER, L. N.

"Computatbrs for the Determination of the Most Suitable Sequence of Cuts in Metal-Working Industry."

report presented at the Conference on Automation and Computation Engineering, Moscow, 5-8 March 1957. Organized by AU Sci. Eng. and Tech. Society for Apparatus Building.

Fitsner, L.N.

120-4-9/35

AUTHORS: Manukhin, A.I., Fel'dbaum, A.A. and Fitsner, L.N.

TITLE: Non-linear Function Generators with Two Inputs (Nelineynyye preobrazovateli s dvumya vkhodami)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, No.4, pp. 33 - 38 (USSR)

ABSTRACT: The design of a two-input, non-linear function generator which produces an output $y = f(x_1 x_2)$, where x_1 and x_2 are the input voltages is given. The principles of operation and the results of tests on the circuits are described. Change from one function to another is not complicated and is obtained by a system of hand controls.
In the electronic relay circuit, the function of one independent variable is formed by use of identical diode stages. Each stage includes a voltage divider and several potentiometers which are connected by two-pole switches to either the anode or the cathode of the diode to enable both positive and negative values to be handled. One of the arms of each voltage divider is connected to a constant voltage E (or -E). The second arm of the dividers is connected to one of the input voltages x_1 (or x_2). The impedances of the dividers in the different stages

Cardl/3

are arranged so that the diodes conduct at determined values of the input voltage x_1 . These values are the limits of the increments over which the function is considered linear. The voltages from the wipers of the potentiometers are passed to summing amplifiers Y_1 and Y_2 . By arranging the wipers of the potentiometers, each of the amplifiers forms the functions $f_i(x_1)$ and $f_{i+1}(x_1)$. A voltage dependent on the value of the second variable x_2 and proportional to the function $f_i(x_1)$ obtained from the diode generator is switched to the output of the apparatus. This switching is obtained by a series of triggers. To ensure linear increment approximation for x_2 , a third amplifier Y_3 and a block product (BP) are used. At the output of the amplifier Y_2 is obtained the difference between the voltages proportional to $f_i(x_1)$ and $f_{i+1}(x_1)$ at the ends of an increment of x_2 . This difference is connected to the input of the BP. The second factor of the BP is

Card 2/3

proportional to:

$$\frac{\overline{x_2}}{\left[(x_2)_k - (x_2)_{k+1}\right]} .$$

The denominator of this expression equals the value of the increment of x_2. The numerator $\overline{x_2}$ is proportional to the change of x_2 in the interval $(x_2)_k - (x_2)_{k+1}$. This value is equal to the difference between the continuous value of the voltage x_2 and its preceding fixed value $(x_2)_k$ at the boundary of the corresponding increment. The difference is obtained by an amplifier at the input of which is applied $-x_2$ and $(x_2)_k$. Connection of the value $(x_2)_k$ is realised by the relay contacts which simultaneously switch the voltages proportional to the functions $f_i(x_1)$.

There are 13 figures and 9 references, 8 of which are Slavic.

SUBMITTED: September 19, 1956.
AVAILABLE: Library of Congress

FITSNER, L. N.

AUTHORS: Medvedev, L.V., Fel'dbaum, A.A., Fitsner, L.N. (Moscow) 103-10-3/10

TITLE: The Non-Linear Function Generator Possessing Only One Input. (Nelineynyye preobrazovateli s odnim vkhodom)

PERIODICAL: Avtomatika i Telemekhanika, 1957, Vol. 18, Nr 10, pp. 899-910 (USSR)

ABSTRACT: The possibilities for the construction of a non-linear electron transformer with one input are investigated. The results of the elaboration of the basic types of non-linear transformers: combind with diodes, with diodes and triodes, and with compensation are given. The working method of this device and a description of the NP-1 apparatus are given. This is the result of a long development and it has shown positive results. The securing of greater exactness, stability and the extension of the class of the reproduced curves was solved by the introduction of the compensation principle. In the case of less severe requirements NP-1 should be used with diodes. However, if curves with great slopes and strong salient points are to be reproduced, it is more profitable to use NP-1 with diodes and triodes or combined NP-1. In special cases where increased stability is demanded at a small number of partly linear approximation intervals schemes with pure com-

Card 1/2

The Non-Linear Function Generator Possessing Only One Input. 103-10-3/10

pensation can be used. There are 10 figures and 11 Slavic references.

SUBMITTED: July 16, 1956

AVAILABLE: Library of Congress

Card 2/2

16.6800
18.5200

80428
SOV/112-59-23-48191

Translation from: Referativnyy zhurnal Elektrotekhnika, 1959, Nr 23, pp 131 - 132 (USSR)

AUTHORS: Vasil'yev, D.T., Fitsner, L.N.

TITLE: Computing Device for Determining the Optimum Cutting Conditions

PERIODICAL: V sb.: Avtomat. upravleniye i vychisl. tekhn. Moscow, Mashgiz, 1958, pp 362 - 374

ABSTRACT: A device for determining the optimum cutting conditions for metals is described. Potentiometers P_1 having a special logarithmic winding are connected to an electric circuit for solving the transcendental equations of type $1 = a_1^{b_1} \cdot a_2^{b_2} \cdot a_3^{b_3} \ldots \ldots a_n^{b_n}$, where a_i, b_i are real values and as unknown can be any value. One end of P_1 is connected to the terminal of the feeding battery and the other end to the middle zero point. To the slide of P_1 the ends of linear potentiometers P_1' are connected; the other end of P_1' is connected to the zero point. From P_1' the voltage through the resistance R_1 is supplied to the summing indicator. The voltage supplied to the indicator is $c_i = c\alpha_i \cdot \lg \beta_i$,

Card 1/2

80423
SOV/112-59-23-48191

Computing Device for Determining the Optimum Cutting Conditions

where α_i, β_i are deflections of slides of P_1 and P_1' potentiometers from the end with the zero potential. It is shown that in the circuit holds the equation:

$$\alpha_1 \lg \beta_1 + \alpha_2 \lg \beta_2 + \alpha_3 \lg \beta_3 + \ldots + \alpha_n \lg \beta_n = 0.$$

To find one unknown value α or β, all known data are set and the value sought for is selected on the basis of the zero of indicator. An example of solution of a transcendental equation is analyzed. A table of equations for the optimum cutting conditions is supplied. A description of the design and of the method to protect the indicator from an increased voltage is given. Seven illustrations.

Yu.M.V.

Card 2/2

SOV-115-58-3-28/41

AUTHORS: Medvedev, L.V., and Fitsner, L.N.

TITLE: A Protection Device for Voltmeters and Oscillographs (Zashchitnoye ustroystvo dlya vol'tmetrov i ostsillografov)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 3, p 79 (USSR)

ABSTRACT: The described and illustrated circuit with silicon diodes has been experimentally tested by a class 1 microampereme-ter "M24" with a 100 mka range and 850 ohm internal resi-stance. Connection of the silicon diodes in parallel with the instrument did not change its readings in a temperature range of up to +70°C, and input voltage exceeding 100 times the measurement range did not cause breakdown. The micro-amperemeter was subjected to only a fivefold overload. There is 1 diagram.

1. Voltmeters--Equipment 2. Oscillographs--Equipment

Card 1/1

28(1)

AUTHOR: Fitsner, L. N. (Moscow)

SOV/103-19-12-3/9

TITLE: On the Choice of the Power Element of Optimum Automatic Control Systems (O vybore silovoy chasti optimal'nykh sistem avtomaticheskogo regulirovaniya)

PERIODICAL: Avtomatika i telemekhanika, 1958, Vol 19, Nr 12, pp 1107 - 1117 (USSR)

ABSTRACT: A practical example is in this paper chosen as a means of showing the construction of diagrams which permit to decide whether systems with a not optimally performing final control element approach an optimum control system. The diagrams are utilized for estimating the usefulness of changing the final control element of a not optimally performing system. Information is also presented on the construction of a servo-system with an optimum law of control. The time characteristics obtained experimentally are compared with those from the diagrams. The example chosen is that of a very simple servo-system consisting of a relay with a d.c. motor with an independent excitation. The voltage applied to the motor windings is in this system a limited quantity. It is shown that it proves to

be expedient to plot diagrams for the most commonly used types of final control elements describing the dependence of the highspeed action of the system upon the parameters of the final control elements. With the help of these diagrams the duration of the transient process in optimum automatic control systems, which energizes either of two final control elements can be determined. Thus it is possible to solve the question whether the final control element serves its purpose. The type of optimum system investigated did not show a divergence of more than 10 % of the experimentally obtained transient period from that determined from the diagram. There are 7 figures and 14 references, 12 of which are Soviet.

SUBMITTED: July 30, 1957

9(6)

AUTHORS: Doganovskiy, S. A., Engineer, SOV/119-59-1-9/20
Fitsner, L. N., Candidate of Technical Sciences

TITLE: A Method of Computing the Electrical Scheme of Non-Linear Diode Transformers (O metodike rascheta elektricheskikh skhem diodnykh nelineynykh preobrazovateley)

PERIODICAL: Priborostroyeniye, 1959, Nr 1, pp 15-18 (USSR)

ABSTRACT: A device with an output voltage Y being a single value of a non-linear function f of the input voltage X, e.i. Y=f(X) is called an electric non-linear transformer. The method is described of computing the reproduction of a given function in a non-linear diode transformer by applying a stepwise linear approximation. The schemes of such transformers consist of a number of elementary cells which do just correspond to such a linear approximation piece. In order to be able to describe the function in its entire given domain the individual cells of this non-linear transformer are either connected with the input circuit or the feed back circuit of a direct current operational amplifier with a high amplification coefficient. A valve or also a semiconductor diode are used as detector. If a silicon diode is used it is advisible to use an additional

Card 1/2

second diode. If a flat germanium diode serves as detector it is advisible to connect it as suggested. As far as the computation of the single cells is concerned the corresponding formulas are derived and it is proved by means of a numerical example that the mathematically found values do only differ by 1-2% from the values found experimentally. If no satisfactory accuracy is achieved the resistances computed for the single cells must be corrected experimentally. There are 4 figures and 7 Soviet references.

FITSNER, L.N. (Moskva)

Precision multiplier link [with summary in English]. Avtom. i telem. 20 no.1:62-69 Ja '59. (MIRA 12:1)
(Calculating machines)

ALYSHEV, Yu.M.; FITSNER, L.N.; SHEVCHENKO, L.I. (Moskva)

Electronic computers for automatic control of electric power led into electric-arc steel furnaces. Avtom.i telem. 20 no.2:206-210 F '59. (MIRA 12:3)

(Electric furnaces) (Automatic control)

PHASE I BOOK EXPLOITATION SOV/4411

Konferentsiya po voprosam teorii i primeneniya diskretnykh avtomaticheskikh sistem, Moscow, 1958

Teoriya i primeneniye diskretnykh avtomaticheskikh sistem; trudy konferentsii (Theory and Application of Discrete Automatic Systems; Transactions of the Conference) Moscow, AN SSSR, 1960. 572 p. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Natsional'nyy komitet SSSR po avtomaticheskomu upravleniyu. Institut avtomatiki i telemekhaniki.

Editorial Board: M.A. Gavrilov, Doctor of Technical Sciences, Yu.V. Dolgolenko, Doctor of Technical Sciences, V.A. Kotel'nikov, Candidate of Technical Sciences, A.Ya. Lerner, Doctor of Technical Sciences, I.S. Morosanov (Scientific Secretary), G.S. Pospelov, Doctor of Technical Sciences, A.A. Fel'dbaum, Doctor of Technical Sciences, A.V. Khramoy, Candidate of Technical Sciences, and Ya.Z. Tsypkin, Doctor of Technical Sciences; Resp. Ed.: Ya.Z. Tsypkin, Doctor of Technical Sciences; Ed. of Publishing House: M.L. Podgoyetskiy; Tech. Ed.: S.G. Markovich.

PURPOSE: These transactions are intended for the members of the conference and other specialists in automatic control.

COVERAGE: The Conference on the Problems of Theory and Application of Discrete Automatic Systems took place in Moscow from September 22 to 26, 1958. It was the first conference devoted to discussions of the present status of the theory and techniques of discrete automatic systems and to planning for future development. The papers discussed at the conference have been divided into four groups. In the first group optimization switching circuits are discussed as well as methods of relay control systems, in particular plant lag control systems in which are realized optimal processes as to quick response. The second group of papers is devoted to the analysis and synthesis of pulse systems with variable parameters, of pulse systems with several pulse components, to the study of self-oscillation phenomena in nonlinear pulse systems, and to the methods of calculating linear pulse systems. Problems of simulating pulse systems and descriptions of some pulse regulators have also been included. The third group of papers deals with digital systems. Problems of using elements of digital technique and digital computers for the automation of various fields of engineering, i.e., power engineering, mining, radio communication, metallurgy, etc., are discussed. Problems of analog-digital conversion and vice versa as well as problems of developing specialized functional converters have been included in this group. The fourth group of papers includes theoretical elements and certain practical applications of the simplest types of self-adjusting systems, optimalizing control systems, which are developed as relay, pulse and digital devices. Here are also found papers describing various methods of investigating steady state conditions in optimalizing systems, results of studying the effects of random factors on the process of automatic scanning, and examples of existing optimalizing control systems. Some of the more interesting communications and observations made during the discussion of the various conference papers have also been included in the Transactions. Personalities and references accompany most of the papers.

Ostrovskiy, Yu.I. (Moscow). Certain Problems on the Theory of Peak-Holding Optimalizing Control Systems 446

The author describes a control system with an optimalizing peak-holding pneumatic controller. He describes the controller with differential equations and logical formulae. The problem is reduced to calculating self-oscillations in a single-loop circuit containing arbitrary linear and two nonlinear sections. There are 8 references: 6 Soviet (including 1 translation) and 2 English.

Fel'dbaum, A.A. (Moscow). Effect of Random Factors on the Processes of Self-Optimization 464

The author examines discrete optimalizing control systems of two types: systems with extrapolation and step systems. There are 17 references: 14 Soviet (including 1 translation) and 3 English.

Fitsner, L.N. (Moscow). Principles of Construction and Methods of Analysis of Certain Types of Optimalizing Control Systems 480

The author investigates two types of optimalizing control systems: 1) an automatic optimalizing system with a relay circuit; and 2) a noiseproof automatic optimalizing system of proportional action. Both systems were investigated with the help of electronic simulation devices and the second system was also studied in two real extremal systems of automatic control. There are 11 references: 9 Soviet, and 2 English.

FITSNER, L.N.

FITSNER, L. N.

report to be presented at the 1st Intl Congress of the Intl Federation of Automatic Control, 25 Jun-5 Jul 1960, Moscow, USSR.

LERNER, A. Ya., - "The application of a self-adjusting system of automatic control"
MALOV, V. S., PSHENICHNIKOV, A. M., and [illegible] A. - "Industrial telemeasurement systems and digital technique"
MEYEROV, M. V. - "Some peculiarities of the structure of multi-communications regulation systems"
MIKHAYLOVSKIY, V. N. - "Evaluation indexes and the possibility of increasing the quality of telemeasurement systems"
NEMYTSKIY, V. V. - "Concerning the problem of established routines in automatic regulation systems"
NETREBENKO, K. A. "Principals of construction of digital double code automatic compensators"
NEYMARK, Yu. I. - "Concerning the relation of systems of automatic regulation with the parameters of periodic movements"
NIKOLAYEV, N. S., and EPSHTEYN, V. L. - "System of automatic control of cutting of rolled metal on a continuous bar mill with the use of digital calculating machines"
OBUKHTEEV, V. M. - "Some principles of organizing systems of complex automation of large scale chemical production and optimization of these systems"
OSTROVSKIY, G. M. - "Systems of automatic regulation with intermittent change of parameters"
PEROV, V. P. - "Statistical synthesis of impulse systems"
PETROV, B. N. - "The invariant principle and its application in the calculation of linear and nonlinear systems"
PIVEN, V. D. - "The problem of autonomy in the technique of automatic control"
POPOV, E. P. - "Some problems of synthesis of automatic control non-linear systems"
PUGACHEV, V. S. - "Method of determining the optimum system with non-linear relation of the observed function with the parameters of the signal"
PUTSILLO, V. P., PETROV, V. V., KOSDINOV, R. V., and VOLODIN, E. E. - "Principles of construction of a single class of extra control systems for automating production processes"
ROGINSKIY, V. N. - "The development of the theory of relay devices in the USSR"
ROZENBLAT, M.A. - "Dynamic characteristics of cores with right angle hysteresis winding and their influence on magnetic boosters"
ROZONER, L.I. - "Varied methods of investigating the quality of automatic control systems"
RUBINSHTEYN V. M. - "Dynamics of automatic regulation of boiler-turbine units"
SHUMILOVSKIY, N. N., MEL'TTSER, L. V., NAUMOV, A. A., [illegible], and PIVOVAROV, L. A. - "Automatic control of composition of multi-ingredient mixtures"
SHAGOVSKIY, E. S., and ZEMALIN, V. G. - "Some results of work for the utilization of radioactive radiation for automatic control of mining machinery"
SOLODOVNIKOV, V. V., BATKOV, A. M., BABUKIN, V. M., VAL'DENBERG, Yu. S., MATVEYEV, P. S., and POKROVSKIY, A. K. - "Analyses and synthesis of automatic control systems with the aid of calculating machine facilities"
STAKHOVSKIY, R. I., FITSNER, L. N., [illegible] "Automatic... optimizers and their use for solution of variation problems in automatic synthesis"
STRAKHOV, S. V. - "A system of alternating current electric drives with autonomous power supply"
TAKHAR, I. M., and YANUSHKOVSKIY, V. A. - "Apparatus for technical control of production with the use of nuclear radiation"
TEODORCHIK, K. F., and BENDRIKOV, G. A. - "Methods of organizing the trajectory of roots of linear systems and qualitative determination of type of trajectory"
TSYPKIN, Ya. Z. - "Elements of the theory of digital automatic systems"
VENCHKOVSKIY, D. B., KASHIRIN, V. A., CHUGIN, Yu. I., and KHASTOVA, G. A. - "Static stability of telemeasurement"
VENIKOV, V. A. - "Interactions of a mathematical modeling and calculating technology experiment in calculating loads in electrical systems"

1.1100

31223
S/123/61/000/020/016/035
A004/A101

AUTHORS: Pankin, A. V., Fitsner, L. N.

TITLE: Device for determining the optimum cutting conditions on lathes

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 20, 1961, 44-45, abstract 20B240 (V sb. "Avtomatiz. mashinostroit. protsessov", v. 3, Moscow, AN SSSR, 1960, 20-31)

TEXT: The authors describe the design of a device making it possible to determine the operation conditions of lathes in such a way as to ensure their maximum efficiency. They present an analytical method of solving the problem of determining the optimum cutting conditions. The method is based on the solution of six main equations connected with the kinematics and kinetostatics of the lathe, kinetostatics of cutting, power input and conditions of maximum efficiency of the system lathe - tool. The device operation is based on the solution of these equations to find the number of revolutions and feed. The authors present a basic diagram of the device, give the setting order and the method of using the device. It is pointed out that the error in device readings

Card 1/2

Device for determining the optimum ...

does not exceed 2 - 4% in comparison with the analytical calculation method. There are 6 figures and 1 table.

L. Bozin

[Abstracter's note: Complete translation]

Card 2/2

S/105/60/000/08/13/023
B012/B058

AUTHOR: Fitsner, L. N., Candidate of Technical Sciences

TITLE: Automatic Electric Optimizers

PERIODICAL: Elektrichestvo, 1960, No. 8, pp. 61 - 67

TEXT: Two automatic electric optimizers developed at the Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics of the AS USSR) are described here. They render it possible to find the extreme values of the function y of a variable x, if a point corresponding to the value dy/dx = 0 exists in the given range. The first is an automatic relay optimizer, the block scheme of which is shown in Fig. 1. It consists of the differentiating block, impulse generator, block of the direction of movement and switching installation. The optimizer is built up on the basis of relays and its circuit is shown in Fig. 2 and described with its aid. The procedure of seeking the extreme value in a system with an automatic optimizer and an inert object is explained with the aid of Fig. 3. The 3 main types of the search process are described. The relay system of the automatic search was

VB

Card 1/3

investigated on an electronic simulator. The oscillograms corresponding to the 3 main types mentioned are shown in Fig. 6. A noiseproof optimizer with proportional mode of action is described next. It is almost free of the drawbacks of the optimizing control system described in the paper (Ref. 2). The block diagram is given in Fig. 7 and the circuit of this optimizer in Fig. 8. It is described with the aid of these figures and its mode of operation is explained. This optimizer was tested on an electronic simulator, as well as in a real system for the automatic tuning of the anode circuit of the power cascade of a radio transmitter in resonance with the frequency of the control generator. These experiments are described here and the oscillographs obtained are given in Fig. 9. Such an optimizer is shown in Fig. 10. The following is stated in conclusion: The experimental investigations of the automatic relay optimizer showed that the optimizer operates reliably and the search process is stable with the right selection of the time intervals between the measurements of the value y according to the formula given here. The operation of the second optimizer described here was checked in 2 systems and one is being erected at present at a radio transmitter. It is intended to use the optimizers described here for the automatic

Automatic Electric Optimizers

S/105/60/000/08/13/023
B012/B058

determination of the most favorable ratio between fuel and air in Siemens-Martin furnaces and preheaters, for the determination of the most favorable position of work pieces during their mechanical treatment, and for the automatic operation of units in the chemical industry. There are 10 figures and 6 references: 4 Soviet and 2 English.

ASSOCIATION: Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics of the AS USSR)

SUBMITTED: October 29, 1959

Card 3/3

S/103/60/021/008/002/014
B012/B063

AUTHOR: Fitsner, L. N. (Moscow)

TITLE: Two Kinds of Optimum Extreme Systems

PERIODICAL: Avtomatika i telemekhanika, 1960, Vol. 21, No. 8, pp. 1115-1121

TEXT: Two kinds of extreme systems are studied in the present paper: 1) optimum systems with respect to quick action; 2) optimum systems with respect to the integral value of the dynamic error. The extreme points are assumed to be sought in an inert system, one of its coordinates having a limit. The limitations imposed on the characteristics of the object in the construction of optimum extreme systems are shown. It is further assumed that no random disturbances occur and the object consists of two parts, i.e., the inert linear one and the inertialess non-linear one. The linear part consists of two integrating members which are connected in series. The non-linear part is expressed by equation (1). The author studies the case in which it is possible to measure the rate with which the initial value of the linear part changes. The system that is optimal with respect

Card 1/3

to quick action is schematically shown in Fig. 1. This scheme consists of the object desired and the control apparatus. The author studies the case in which the quantity x_2 at the input of the object has a limited modulus. The system has to find the extreme point as quick as possible. The control law for this system is obtained in the form of equations (5). The pertinent electric circuit of the apparatus used for the optimum control of the object is shown in Fig. 2 and described. Next, the author studies an extreme system with a minimum dynamic error. Formula (8) is written down for the total dynamic error. Using L. S. Pontryagin's maximum principle (Ref. 7) the author derives the control law for the case in which the dynamic error will have a minimum: formula (20). The two systems are compared with each other, and it is shown that they are almost equal and have practically the same control apparatus. The circuit diagram represented in Fig. 2 was experimentally studied on an electronic simulator. The results obtained are given. They are considered to be satisfactory. K. B. Norkin and V. A. Yakovlev participated in the experimental study of the system. There are 5 figures and 8 Soviet references.

Two Kinds of Optimum Extreme Systems

S/103/60/021/008/002/014
B012/B063

SUBMITTED: March 22, 1960

Vc

Card 3/3

FITSNER, L.N.

Discrete voltage differentiator. Priborostroenie no.7:8-9 Jl '61. (MIRA 14:6)
(Electronic differential analyzers)

S/103/61/022/001/007/012
B019/B056

AUTHOR: Fitsner, L. N. (Moscow)

TITLE: The Automatic Optimization of a Spatial Distribution. I

PERIODICAL: Avtomatika i telemekhanika, 1961, Vol. 22, No. 1, pp. 67-76

TEXT: In numerous technical problems the necessity arises to distribute an arbitrary physical quantity Φ in a three-dimensional space in such a manner that Φ as far as possible approaches a desired distribution at n given space points. These problems occur in the working of workpieces, in problems of flow in space etc. Thus, the problem often arises to obtain a certain definite distribution of sound intensity in n given points by means of m sound sources. In this connection it is of importance that mostly the individual points are interrelated. The present paper, above all, deals with the distribution of allowances in the mechanical treatment of blanks of complex shape, but the results may also be applied to similar cases. It is the purpose of the present work to find a method of clamping complex parts, which must be mechanically treated, onto the machine in such a manner that the material layers to be removed are of the same

thickness over the entire part. The automation of the distribution of allowances may be carried out by means of three types of automatic regulating systems: 1) By means of an open-loop circuit, 2) by means of an automatic control system, and 3) by means of an automatic scanning system. The principle of distribution automation is discussed by the author on the basis of the two pentagons of equal shape, shown in Fig.2, which are by means of this principle supposed to be superimposed so that they coincide exactly. The author arrives at the conclusion that automatic scanning systems are best suited to attain an optimum distribution of parts of unequal shape. Fig.3 shows the block diagram of such a system. On the basis of technical (not mathematical) considerations the author further investigates the selection of a suitable automatic scanning method. Altogether he discusses seven different scanning methods, from which he selects the following: 1) A method in which the input quantity changes steadily and the increment of the output quantity is measured within the same time interval. 2) A step method in which equally large steps are separated by equal time intervals. Problems connected with these scanning methods will be dealt with in a later paper. Here, the author refers to the comparatively simple circuits, by means of which the above-mentioned

scanning methods may be carried out. In the final part of this paper the author studies the effect of the static characteristics of the object upon the accuracy and time of scanning. The author studies the finding of the minimum of the function

$$Q = x_1^2/a + x_2^2/b \quad (12)$$

by scanning in the direction of the coordinate axes x_1 and x_2. On the basis of a graphical representation of ellipses he shows that in each single scanning cycle, the sign must be changed, as otherwise the point round which the system performs an oscillation, is too far distant from the extremum of the function. Another method is the introduction of a coordinate transformation circuit, which changes the scanning axis. There are 7 figures and 8 references: 7 Soviet and 1 US.

SUBMITTED: July 22, 1960

Legend to Fig.3: П platform for fastening the work piece. Д work piece. $ИО_1$, $ИО_2$, $ИО_n$ final control organs. $И_1$, $И_2$,..., $И_n$ indicators. БКОР discriminator for the optimum position of the work piece. АО automatic optimizer.

S/103/61/022/001/007/012
B019/B056

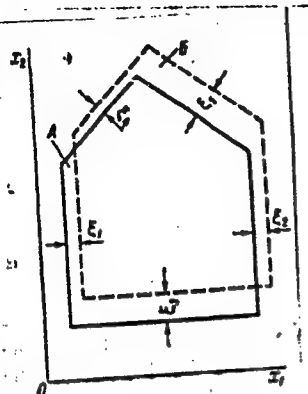


Рис. 2 (Fig. 2)

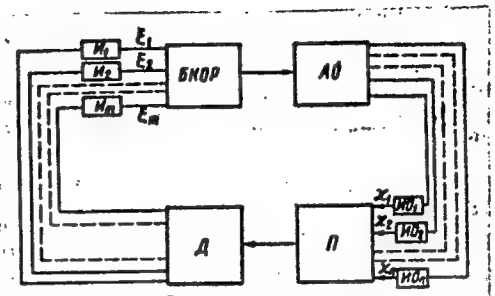


Рис. 3 (Fig. 3)

Card 4/4

FITSNER, L.N. (Moskva)

Automatic optimization of space distribution. Part 2. Avtom.i telem. 22 no.7:857-864 Jl '61. (MIRA 14:6)
(Automatic control) (Electromechanical analogies)

FITSNER, L.N. (Moskva)

Automatic optimization of space distribution. Part 3. Avtom. i telem. 22 no.8:1002-1012 Ag '61. (MIRA 14:9)
(Automatic control)

35317
S/103/62/023/002/003/015
D230/D301

16.8000 (1031,1132,1329)

AUTHOR: Fitsner, L.N. (Moscow)

TITLE: Automatic optimization of space distribution. IV

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 2, 1962, 148 - 157

TEXT: Basic criteria governing the choice of parameters of the control system are stated. The solution of the problem of search time minimization in the case investigated is divided into two stages: a) Optimum law is found for which steps in each of the channels are accomplished in a minimum time; b) The magnitude of the steps are found for which the search-time is minimum and the error does not exceed stated limits. The design of optimally-fast automatic synthesizer with limited coordinate values is facilitated considerably by choosing fixed step values. In this case it is adequate to determine the form of input for the fastest operation of step values and to design a generator of input information of the form found constant for every channel. Any apriori information about the form of an input signal can be found by means of an automatic scanning

Card 1/2

optimizer. In this, the time interval of input information is split into n equal sub-intervals. Using the automatic scanning optimizer each of the n sub-intervals can have s levels of intensity; for this, an arbitrary form of input can be generated with an accuracy determined by the number of sub-intervals chosen and the number of discrete values of the variable in each of the sub-intervals. This method is suitable for finding practically any form of input information. The choice of the method of automatic search for optimum distribution was based on the assumption that in the optimizing functions there exists one extremum. Proof of a simple theorem yields sufficient conditions for which the assumption is justified. The description of the apparatus for the automatic distribution control system includes that of optimum distribution criterion stage, a single-channel automatic optimizer and a commutator. Two new important problems are discussed: The first refers to automatization of grid models for solving equations of partial derivatives, the second, to automatization process of load distribution and automatization of the process of shifting the output center into any preset point. There are 10 figures and 11 Soviet-bloc references.
SUBMITTED: July 7, 1961
Card 2/2